

Title (en)
ENZYME PRE-GRANULES FOR GRANULAR FODDER

Title (de)
ENZYM-VORGRANULAT FÜR TIERFUTTERMITTEL-GRANULATE

Title (fr)
PREGRANULE ENZYMATIQUE POUR FOURRAGE SOUS FORME DE GRANULES

Publication
EP 0917430 B2 20080312 (DE)

Application
EP 97922981 A 19970506

Priority
• DE 19619219 A 19960513
• EP 9702306 W 19970506

Abstract (en)
[origin: US6221406B1] The invention relates to the preparation of enzyme pregranules with stable activity which can be incorporated into particles of a granular animal feed. The invention further relates to the pregranules with stable activity which are obtained by the preparative processes and can be incorporated into granular animal feeds.

IPC 8 full level
A23K 1/00 (2006.01); **A23K 20/189** (2016.01); **A23K 40/10** (2016.01); **A23K 40/20** (2016.01); **C12N 9/98** (2006.01)

CPC (source: EP US)
A23K 20/189 (2016.05 - EP US); **A23K 40/10** (2016.05 - EP US); **A23K 40/20** (2016.05 - US); **A23K 40/25** (2016.05 - EP US); **C12N 9/98** (2013.01 - EP US)

Citation (opposition)
Opponent :
• WO 9742839 A1 19971120 - GENENCOR INT [US], et al
• EP 0257996 A2 19880302 - SUOMEN SOKERI OY [FI]
• EP 0280226 A2 19880831 - SUOMEN SOKERI OY [FI]
• WO 9712958 A2 19970410 - GENENCOR INT [US]
• WO 9423005 A1 19941013 - HENKEL KGAA [DE]
• Ullmann's Encyclopedia of Industrial Chemistry, Bd. A11, S. 551, 552, 1988
• Heimann, Grundzuege der Lebensmittelchemie, 1976, S. 361-364

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT SE

Designated extension state (EPC)
RO SI

DOCDB simple family (publication)
US 6221406 B1 20010424; AT E232687 T1 20030315; AU 2892297 A 19971205; BG 102891 A 19990930; BG 64034 B1 20031128; CZ 365898 A3 19990217; DE 19619219 A1 19971204; DE 59709356 D1 20030327; DK 0917430 T3 20030610; EP 0917430 A1 19990526; EP 0917430 B1 20030219; EP 0917430 B2 20080312; ES 2192681 T3 20031016; ES 2192681 T5 20080816; JP 2002502236 A 20020122; JP 3782828 B2 20060607; NO 320976 B1 20060220; NO 985115 D0 19981102; NO 985115 L 19981102; PL 185296 B1 20030430; PL 329939 A1 19990426; PT 917430 E 20030731; SK 155098 A3 19990413; TR 199802287 T2 19990222; WO 9742837 A1 19971120

DOCDB simple family (application)
US 18061799 A 19990225; AT 97922981 T 19970506; AU 2892297 A 19970506; BG 10289198 A 19981103; CZ 365898 A 19970506; DE 19619219 A 19960513; DE 59709356 T 19970506; DK 97922981 T 19970506; EP 9702306 W 19970506; EP 97922981 A 19970506; ES 97922981 T 19970506; JP 54046997 A 19970506; NO 985115 A 19981102; PL 32993997 A 19970506; PT 97922981 T 19970506; SK 155098 A 19970506; TR 9802287 T 19970506